



Integrated Device Technology, Inc.  
2975 Stender Way, Santa Clara, CA - 95054

## PRODUCT/PROCESS CHANGE NOTICE (PCN)

PCN #: **L0311-01**      DATE: 11/12/03  
Product Affected: Please see attachment.

MEANS OF DISTINGUISHING CHANGED DEVICES:  
 Product Mark  
 Back Mark      Assembly lot # will have a "T" prefix  
 Date Code  
 Other

Date Effective: December 12, 2003

Contact: Bimla Paul  
 Title: Quality Assurance Manager  
 Phone #: (408)-654-6419  
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Attachment:  Yes       No

Samples: Available upon request

**DESCRIPTION AND PURPOSE OF CHANGE:**

- Die Technology
- Wafer Fabrication Process      To qualify ASAT (Hong Kong) as an alternate assembly facility for NL56, NLG56, NL68 & NLG68 (VFQFPN) packages.
- Assembly Process
- Equipment
- Material      This qualification will improve IDT's support of current and future production needs by increasing assembly capacity of NL56, NLG56, NL68 & NLG68 (VFQFPN) packages.
- Testing
- Manufacturing Site
- Data Sheet      Note: No mixing of assembly locations is allowed within one shipment.
- Other

**RELIABILITY/QUALIFICATION SUMMARY:**

Please see the attachment for qualification data.

**CUSTOMER ACKNOWLEDGMENT OF RECEIPT:**

IDT records indicate that you require written notification of this change. Please use the acknowledgement below or E-Mail to grant approval or request additional information. If IDT does not receive acknowledgement within 30 days of this notice it will be assumed that this change is acceptable.  
 IDT reserves the right to ship either version manufactured after the process change effective date until the inventory on the earlier version has been depleted.

Customer: \_\_\_\_\_  ***Approval for shipments prior to effective date.***  
 Name/Date: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_  
 Title: \_\_\_\_\_ Phone# /Fax# : \_\_\_\_\_

**CUSTOMER COMMENTS:** \_\_\_\_\_

**IDT ACKNOWLEDGMENT OF RECEIPT:**

RECD. BY: \_\_\_\_\_ DATE: \_\_\_\_\_



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### ATTACHMENT - PCN #: L0311-01

**PCN Type:** Assembly Facility Change

**Data Sheet Change:** None

**Detail of Change:** To qualify ASAT (Hong Kong) as an alternate assembly facility for NL56, NLG56, NL68 & NLG68 (VFQFPN) packages.

	Current Supplier (ATK)	New Supplier (ASAT)
Packages	NL56, NLG56, NL68, NLG68	NL56, NLG56, NL68, NLG68
Mold Compound	EME-G700	EME-G770
Die Attach	Ablestik 8290	Ablestik 2200
Moisture Sensitivity Level	3	3
Singulation Method	Punch	Saw

Note: No mixing of assembly locations is allowed within one shipment.

The following devices are affected by this change:

Part Number	Package Type
IDT74SSTV16859NL	NL56
IDT74SSTVF16859NL	NL56
IDT74SSTVM16859NL	NL56
IDT74SSTVN16859NL	NL56
IDT74SSTV16859NLG	NLG56
IDT74SSTVF16859NLG	NLG56
IDT74SSTVM16859NLG	NLG56
IDT74SSTVN16859NLG	NLG56
IDT5T2010NL	NL68
IDT5T2110NL	NL68
IDT5T2010NLG	NLG68
IDT5T2110NLG	NLG68

Note: Suffix "8" is added to the part number for Tape-&-Reel.

### Conversion Schedule:

**Sample Availability:**  
Now

**Production Shipment:**  
December 12, 2003



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**Qualification Plans:** The ASAT Assembly Qualification results are as follows:

Test Description	Test Method	Test Results NL56 (SS / # of Fails)
* High Accelerated Stress Test (Biased, 130 °C/85% RH, 100 Hrs)	JESD22-A110-B	45/0
* Temperature Cycling (-65 °C to 150 °C, 500 cycle)	JESD22-A104-B	45/0
* Auto Clave (121 °C, 2 ATM, 168 Hrs)	JESD22-A102-C	45/0
High Temp Bake (1000 Hrs @150 °C)	JESD22-A103-B	77/0
Moisture Sensitivity Classification (MSL = Level 3)	J-STD-020B	90/0
Internal Visual Inspection	MIL-STD-883, M2010	5/0
External Visual Inspection	JESD22-B101	25/0
X-ray Examination	MIL-STD-883, M2015	45/0
Bond Pull Test	MIL-STD-883, M2011	5/0
Resistance to Solvents	JESD22-B107	N/A (Lasermark)
Solderability Test	JESD22-B102-C	5/0
Bake & Ball Shear Strength	JESD22-B116	5/0
Physical Dimensions	JESD22-B100-B	5/0
Die Shear Strength	MIL-STD-883, M2019	5/0

**Notes:** \* Test requires moisture pre-conditioning sequence per JESD22-A113C.